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ABSTRACT

The University of Massachusetts has recently developed and implemented a new student opinion survey system. The concept was based on the perceived need of various university decisionmakers for information on student opinion in making various decisions. The purposes of the project were (1) to develop and provide a system whereby a rapid response could be obtained from the student body on any subject matter, especially current events; and (2) to fill a vital gap in available information. (Author)

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Project Pulse

A New Approach to Collecting Information for University Decision Making

by

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Student Affairs Office

University of Massachusetts

April, 1973

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Project Pulse

A New Approach to Collecting Information for University Decision Makers.

The University of Massachusetts has recently developed and implemented a new student opinion survey system. The idea of developing and implementing such an information system was conceived of by the Associate Dean of Students, W. Daniel Fitzpatrick. The concept was based on the perceived need of various university decision makers for information on student opinion in making various decisions. Many problems, crises, and issues arise during the course of an academic year whose nature mandates input of information on student opinion. In the past, for example during the Spring Strike several years ago, or with the ROTC sit in, and other such occurrences, such information had not been systematically collected. At the time of the conception of Project Pulse there was no organized system for collecting or channeling student opinion information. Pulse was therefore organized to provide student opinion data to university decision makers.

The original intention was that the project would serve as an information gathering service for various decision makers on campus. "Decision makers" is defined to include not just administrative personnel, but faculty, students, and various campus organizations as well.

The idea was formalized in a proposal written in June, 1972. In this proposal, a specific purpose was given which this project was to fulfill. That purpose was two-fold: (1) to develop and provide a system whereby a rapid response could be obtained from the student body on any subject matter, especially current events; and (2) to fill a vital gap in available information.

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Given the specification of purpose, the next step in the design of the project was the identification and allocation of resources that were to be made available for the development of such a system. As part of the original proposal submitted for a Student Affairs Office Research Program, (of which Pulse was to be just one project), an initial list of resources was developed. These resources included provisions for the system to be developed and executed by paid students using existing resources--space, phones, secretarial help--in off hours. Thus, the use of existing resources was improved and made more efficient.

The third step in designing the project was the development of the actual survey system (detailed below). One implication of the purpose for such a system was that the system would have to be perceived as legitimate and credible by its audience(s) on campus. One way of helping to insure this was to establish an Advisory Board (later called the Pulse Policy Council), taking the system out of the hands of any one person or office. This Policy Council was to be comprised of students, administrators, technical advisors, and the technical staff implementing the project. It would have control over the entire system: responsibility for insuring the integrity, fairness and openess of the project, as well as its public nature: deciding which of the requests submitted to it would be acted upon and in which order; insuring that any data collected would be public and available to anyone needing or desiring it.

Next, in terms of development, an initial staff was hired and with the Policy Council, hearings were held with various student and administrative representatives in order to identify other implications of the purpose of the system. The Project Director was then made responsible for the actual development of the survey system which by this

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time had acquired the name of "Project Pulse".

Implementing this system meant field testing the product of Step three, as shown above and revising it. This was done on a continuing basis in the form of running a weekly survey, revising continuously as appropriate. It also meant carrying through with the resource allocation, e.g. hiring, training and supervising a regular staff; setting up the day to day mechanisms to keep the system functioning, and so on.

Evaluation of the system in terms of accomplishing its purpose was continuous. Evaluation forms were developed to assess efficiency, completeness and degree of focus of data provided to decision makers. Data is efficient to the degree that it allows decision makers to use it in making decisions. It is complete to the degree that it is "all" the data needed to make a particular decision. Finally, data is focused to the degree that it is provided when needed (Hutchinson, 1972). Revisions were made to the system based on information gathered from the clients served, as well as the day to day feedback of running such a system. The system was also revised on a continuing basis as field test information was confirmed.

In its initial semester of operation, Pulse provided service to a number of university decision-makers: Registrar's Office, Financial Aid Office, a radio station, Administrative Services Office, the Student Senate and even a federally sponsored transportation opinion survey.

Issues surveyed ranged from the Massachusetts loyalty oath issue and registration procedures to the presidential election and janitorial services in the dorms. Because of the success of Project Pulse in its first semester of operation, plans are being developed to expand the operation of providing data for decision making.

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Development of Project Pulse

A second level of conceptualization of Pulse can be described as the development stage of the information system. The specific steps involved in the development of the project design will not be detailed here. It is sufficient to say, that the development was done by an application of Metamethodology (Thomann, 1972) to the stated purpose. Metamethodology, for the purposes of this paper, contains five elements. First, a clear statement of the purpose is secured, in this case, providing student opinion data for University decision makers. Following the specification of this purpose, an analysis of the implications of the purpose is performed. This third element is the design of the procedures to accomplish the purpose. This is followed by the sequencing of the elements. And finally, the implementation of the methodology with revisions as appropriate is carried through.

Student Opinion Survey Methodology: A methodology whose purpose is to provide student opinion data for the University decision makers.

Metamethodology was used to produce a methodology for the purpose of providing data to University decision makers.[1] This methodology has seven elements which are presented here in metric outline form.

1.0 Identify and allocate the resources that are to be available for providing student opinion data for the University decision makers.

1.1 Determine the amount and kinds or resources available to devote to this survey project in a given period of time, e.g. a semester or a fiscal year.

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[1] This is actually a sub-methodology whose purpose is "to provide student opinion data for the University decision makers." This purpose can be seen as a subpurpose of the larger purpose, "to provide student opinion data for decision makers wherever there are students." This, in turn, is actually a specific substep of the purpose "to provide opinion data for decision making." And finally, at the most abstract level, this purpose can be seen as part of the general purpose of, "providing data for decision making." This is the reason why this is actualiy referring to the following as a submethodology as opposed to a methodology.

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1.2 Allocate on a matching basis the identified resources, dividing resources across the number of surveys to be run.

2.0 Identify the decision maker (makers) for whose use student opinion data is to be provided.

2.1 Needs for student opinion data are submitted to the project by various decision makers (potential clients of the project).

2.2 Needs are prioritized for surveying student opinion.

2.21 Randomly order all needs submitted for a pre-specified period of time.

2.22 Apply criteria to each issue submitted as to whether the project will survey it: timeliness; applicability to campus; public nature of the survey.

2.23 Apply these three criteria, eliminating those that do not fit one or more of the criteria.

3.0 Identify the clients of the top ranked issues resulting from 2.2.

3.1 Arrange to meet with the client.

3.2 Meet with the client.

3.21 Secure a commitment from the client as to the public nature of the survey to be held. (If this can't be done, this system would recommend that the process would be terminated with this particular decision maker and the surveyer return to the list of issues resulting from 2.23).

3.22 Secure from the client a clearly specified purpose for this particular survey (if not previously done when issues were originally submitted.).

3.23 Operationalize the purpose and/or do a conceptual system analysis of the issue.

3.24 Have the client specify a population from which the survey will be drawn.

4.0 Design the survey instrument.

4.1 Formulate a draft of the survey instrument. Several criteria of a good survey instrument are: each question should be very clear, concise; preferably short and devoid of any fuzzy concepts; a purpose if needed can be identified for each question.

4.2 Have other staff members react to the instrument to see if it fulfills the intent specified in the purpose of the survey as well as the criteria of a good survey instrument.

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4.3 As time permits and if resources allow take the instrument back to the client for his reaction to insure that the instrument reflects his intent for the survey.

4.4 If resources allow, field test the instrument and make appropriate revisions.

4.5 After revisions are made to the survey instrument, it should be typed, proof read, and duplicated in the amount of the number of respondants to whom the survey instruments will be administered.

5.0 Design and conduct the survey.

5.1 Draw the sample randomly from the total population as specified in 3.24.

5.2 Convene the trained project staff at the appropriate time.

5.3 Orient the staff.

5.31 Inform the staff of the purpose of the instrument; of the client of the survey.

5.32 Go over the survey instrument as a group to clear up any misunderstandings.

5.4 Assign specific names and telephone numbers of interviews from the sample list as drawn in 5.1.

5.5 Administer the instrument over the telephone in the telephone survey format.

5.6 Collect the data.

5.7 Organize the data.

5.8 Analyze the data.

5.9 Prepare a final report on the survey.

5.91 Write the report. The report should include the following information: the client; the purpose; the date; the procedures used including the size of the sample, the number of interviewers, the number of interviewees, the telephone format, etc.; a breakdown of respondants by class, sex, etc.

6.0 Report the data to the appropriate client (i.e. that decision maker who had submitted the original request) and "significant others".

7.0 Evaluate the survey: was the data used and how was it used.

7.1 Completeness

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7.2 Efficiency

7.3 Focus

This is a methodology whose implementation provides for the design and the running of a single survey. The methodology is recycled for each and every survey which is conducted. Therefore steps two through five need to be designed on an emergent basis.

PULSE: An Example of Intrauniversity Cooperation

For Project Pulse, the methodology is used weekly during the academic year. Each week a survey is designed and implemented for the purpose of providing data to a particular decision maker.

According to the scope, focus and purpose of a given survey, a random sample of UMass Amherst students is selected by the computer. The size of the sample was to vary with each survey but an average sample size of 200-250 was regularly aimed at. The computer sampling program prints: the students name, ID number, current telephone number, class, school or college, age, sex and address. Adjustments can also be made in the quantity and type of students selected, e.g. just undergrads, just residential hall students, etc. A different sample is chosen each week, and the computer will not select the same sample twice in the same academic year. This is not necessarily true of individual students. In random sampling the probability is such that the same student may be chosen more than once. In fact, there were some students chosen more than once.

The Administrative Data Processing Department wrote the program to draw a random sample from the UMass student body. For each survey ADP has run the program, making those adjustments made necessary by a given survey.

This "resource" which Pulse uses is not a "hard money" re-

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source. That is, specific University funds have not been allocated directly to Pulse. In fact, most of Pulse's resources are not "hard money" resources. The Financial Aid Office enlisted interviewers to actually conduct the weekly survey. These interviewers were students on the Federal Work Study Program. This program allows a student to work a maximum of 15 hours per week. However, because of scheduling difficulties, many work study students are unable to put in their 15 hours during the regular weekly work days. Pulse offered these students a chance to work the additional two to four hours, allowing many students who would have otherwise not been able to, a chance to work the maximum hours allowed.

These interviewers were trained in survey research methods by the project director. In the actual interviewing process, each interviewer fills out a worksheet on each subject he is to call. Once the interview is completed, the data are then transferred to optical scanning sheets. These sheets are processed by an optical scanner which punches the data onto computer cards. An item analysis program is then run on the deck of cards and the results returned to Project Pulse. This is another facet on intrauniversity cooperation. The Counseling Center allowed Pulse to use their computer staff and facilities to run our weekly analysis. They were also kind enough to lend their technical advice and expertise.

There were other university departments involved in helping Pulse. The Student Affairs Office Personnel, in the "spare" minutes, provided us with the secretarial support we needed. The Student Affairs Office, Housing Office and Dean of Students Office allowed Pulse interviewers the use of their office space and telephones. The Project Director was recruited from the School of Education. Some faculty of the School of Education also provided Pulse with

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technical advice and expertise.

In short, Pulse came into being with very few "hard money" resources. Much interdepartmental help and cooperation provided the real basis for the development and continued success of Pulse.

Specific details of the information Pulse has gathered in its first year of operation are not appropriate for the limited space of this article. The reader is welcomed, though, to write for further details. The Pulse staff would be glad to provide such information to anyone requesting it.

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